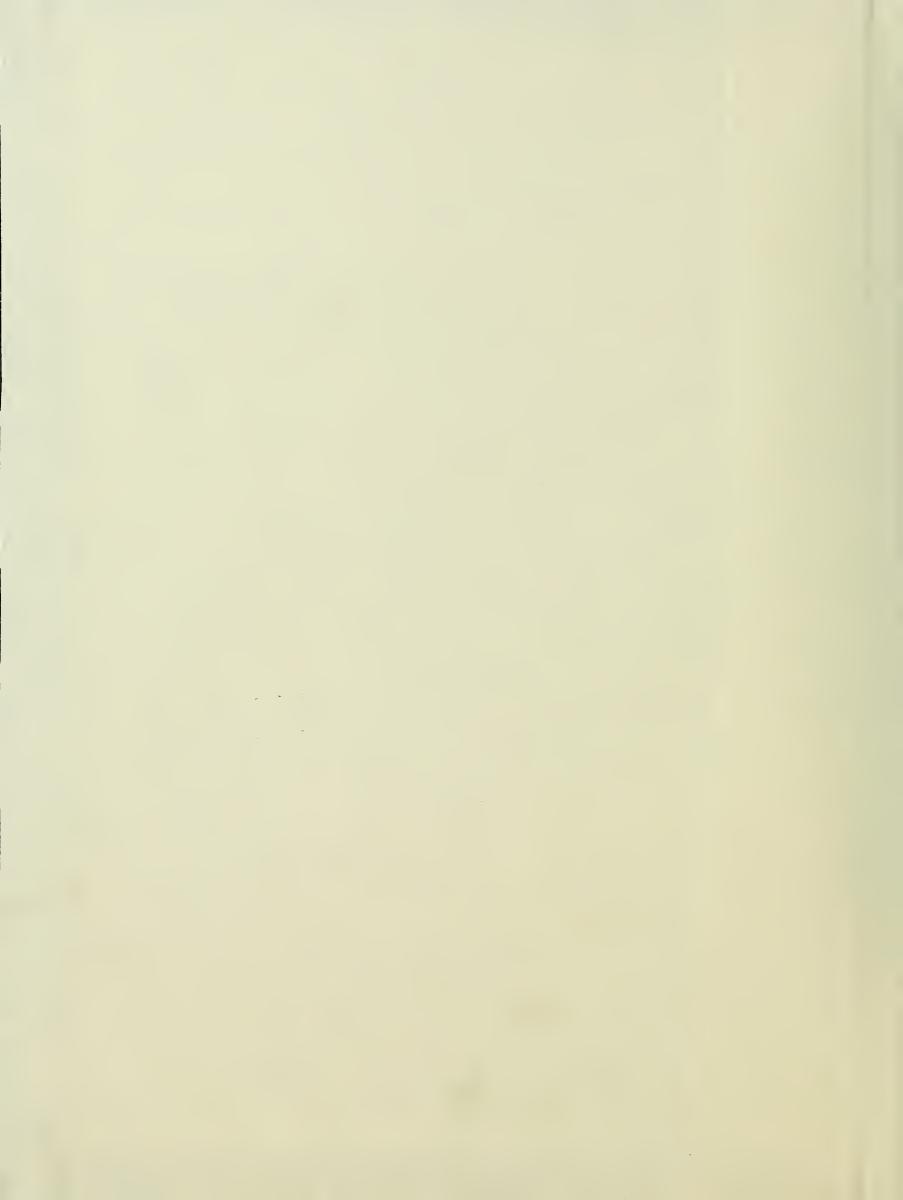


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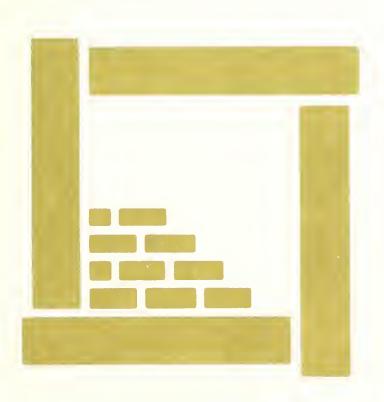
Census of Construction Industries

CC82-I-15

INDUSTRY SERIES

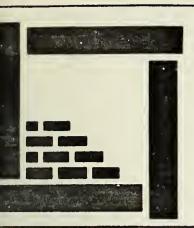
Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors

Industry 1743



BUREAU OF IF CELLSUS

The publications from the 1982 Economic and Agriculture Censuses are dedicated to the memory of Shirley Kallek, Associate Director for Economic Fields. During her career at the Bureau of the Census (1955 to 1983), she continually directed efforts to improve the timeliness and accuracy of economic statistics.



FINAL REPORT INDUSTRY SERIES

1982

Census of Construction Industries

CC82-I-1 to 28 Changed October 1986

CHANGE SHEET

This revision is to table 4 in the original publications for Industry Series CC82-I-1 to 27 and table 8 for Industry Series C82-I-28. In the stub, change 1982 (line 8) to read 1981 and 1981 (line 12) to read 1982.





1982

Census of Construction Industries

CC82-I-15

INDUSTRY SERIES

Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors

Industry 1743

Issued December 1984



U.S. Department of Commerce

Malcolm Baldrige, Secretary
Clarence J. Brown, Deputy Secretary
Sidney Jones, Under Secretary for
Economic Affairs

John G. Keane,
Director



BUREAU OF THE CENSUS John G. Keane, Director C. L. Kincannon, Deputy Director

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This report was prepared in the Construction Statistics Division under the general direction of **Leonora M. Gross**, Chief. Alan I. Blum, Assistant Division Chief for Industry Surveys, was responsible for the overall management of the census of construction industries. He guided the planning and implementation of the project and coordinated activities with other divisions.

A. William Visnansky supervised the preparation of this report. Barbara J. Hadden, Edward R. Glover, Otto G. Ricci, Marie Rustin-Sanhueza, and Shirley M. Baker made important contributions in such areas as developing specifications, procedures, and resolving problems.

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ECONOMIC CENSUSES OVER TIME

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was taken again for 1954, 1958, 1963, and 1967.

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967.

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was first obtained in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 11960's. The census of transportation (consisting of several surveys) was first taken for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service

industries was broadened from "selected services" to all services, except religious organizations and private households. A total of 41 additional four-digit standard industrial classifications¹ (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions and similar labor organizations; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade, and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was first introduced in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and agriculture censuses were conducted concurrently.

USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No.041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

METHOD OF ACCOUNTING AND TIME COVERED

For the census report, respondents could use any system of accounting by which they maintained their books. Therefore, reports could be based on cash, accrual, or completion of contract methods of accounting.

A report was supposed to cover the calendar year 1982. If that involved considerable costs, fiscal year reporting was permitted if it did not produce great differences. However, all payroll and employment figures had to be reported for the calendar year.

CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION

The 1982 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots as defined in the 1972 Standard Industrial Classification (SIC) Manual.¹ This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction—The SIC manual defines construction in three broad types of activity: (1) building construction by general contractors, (2) other construction by general contractors, and (3) construction by special trade contractors.

- Building construction by general contractors—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other projects of a similar character.
- 2. Other construction by general contractors Often referred to as heavy construction contractors, these contractors are primarily engaged in the construction of highways, streets, bridges, and tunnels; docks and piers; dams and water projects; sewage collection, treatment, and disposal facilities; storm sewer systems; air fields; and other heavy construction which involves either earth moving or the erection of structures and appurtenances, other than buildings.
- Construction by special trade contractors—Special trade contractors are primarily engaged in specialized construction activities such as plumbing, painting, electrical work, carpentry, etc.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Construction on their own account, for sale—Operative builders are primarily engaged in constructing buildings or other structures on their own account, acting as their own general contractor. These structures are generally sold when completed. Investment builders, primarily engaged in construction on their own account for rent or lease, were not included within the scope of the construction census.

Subdividers and developers, except cemeteries—The SIC manual defines subdividers and developers, except cemeteries, as establishments engaged in subdividing real property into lots, except cemetery lots, and in developing it for resale on their own account or for others.

In this system, each establishment is assigned an industry code on the basis of its major activity.

Each establishment receiving a questionnaire was requested to report the percent of total business receipts for each kind-of-business activity engaged in during 1982. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction receipts to total business receipts was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities, but in only a few instances do the SIC industry categories take into consideration combinations of activities. An example is SIC 1711, which includes establishments primarily engaged in plumbing, heating, air conditioning, ventilation, and refrigeration work. It is necessary, however, to assign a single industry code to the establishment based on its major activity.

^{&#}x27;Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities.

The structure of the Standard Industrial Classification System makes it possible to classify or tabulate establishments by major group (two-digit), industry group (three-digit), or industry (four-digit) according to the degree of detail available and needed.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business which has been established for the management of more than a single project or job and is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to, estimating, bidding, scheduling, purchasing, supervising, and operating the actual construction work being conducted at one or more construction sites.

Exceptions to the "relatively permanent office" rule were that: (1) in case of joint ventures, a separate establishment report was required covering the joint venture entity even though established to undertake only a single project; and (2) to the extent that separate legal entities were set up to carry out only a given project or part of a project, then a separate establishment report was also required for each legal entity.

To the extent that several companies shared or operated out of a single office or place of business, each such legal entity engaged in construction was considered a separate establishment and each was requested to file the necessary "establishment" report covering the activities it conducted in or from that common office.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1982.

Separate construction reports were not required for each project or construction site. Aggregated information was included in the report of the construction establishment responsible for the work of the construction projects and sites.

If an establishment engaged in two or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, construction, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate etimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1982 gross receipts from construction activities exceeded the gross receipts from each of its other activities.

An establishment is not necessarily identical with a "company" or "enterprise," which may consist of one or more establishments. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

Construction businesses with no payroll during 1982 (nonemployers) were not required to file census reports. Collection and tabulation of data for these businesses are described in the section on "Sample Design." Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND **RELIABILITY OF ESTIMATES**

The firms included in the 1982 Census of Construction Industries were identified as part of an operation common to all 1982 Economic Censuses. Construction firms were divided into employers (firms with payroll) and nonemployers (firms without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government based on information supplied directly to the agencies.

Employer Firms

Developing the sampling frame for employer firms-This operation started with obtaining a list of all construction firms in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of firms engaged in business activities in the United States. The file contains the name, address, and form of ownerhship of each firm and also indicates whether or not the firm is subject to the Federal Insurance Contributions Act. Each firm in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each firm. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrativerecord data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer firms. However, for the 1982 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those firms which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment firms and large single-establishment firms. Thus, the 1982 Economic Census list for single-establishment employer firms was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a firm to the proper economic census, but there were a number of firms for which this information was inadequate or unavailable. A special form, NC-9923, General Report, was mailed to all such firms, requesting information on the nature of the firm's activities. From the information reported, the firm was given an industrial classification code and assigned to the appropriate economic census. Since construction firms found in this way were identified as such, only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

For 1982, some data will be published for Standard Consolidated Statistical Areas (SCSA's) and selected Standard Metropolitan Statistical Areas (SMSA's). Therefore, each establishment was assigned to an SMSA code or to the balance of a State. The balance of the State was considered to be a separate cell for the selection process. In States where none of the SMSA's had more than 500,000 inhabitants in the 1970 Decennial Census, all establishments were assigned to the balance of the State.

Selecting the employer sample - A construction universe of about 464,000 single establishment employer firms and 6,500 multiestablishment employers, accounting for another 13,000 construction establishments, was developed by the procedures described above. From this universe, a sample of 172,000 employer establishments was selected. This sample was generally organized by standard industrial classification (SIC) in State sequence. The sample was designed to provide publishable estimates for the most construction industries at the State and selected SMSA level. It consisted of all construction establishments in multiestabishment companies, all singleestablishment companies with the payroll equivalent of 20 employees or more, and a sample of single-establishment companies with less than 20 employees. There were three SIC's for which this standard plan was not used: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

The number of establishments classified in each of these three industries is very small and consequently, all single-unit establishments in these three industries were included in the sample. For sampling purposes, the number of employees was estimated from the 1981 payroll data in the administrative records, using an industry average wage per employee. The sampling was accomplished using a systematic method within each four-digit SIC. If the SIC code for an establishment was not complete, it was sampled as part of a two-digit group (e.g., 1520 was sampled as 1500, 1620 as part of 1600) except for non-classifiable cases in two-digit group 17. These were sampled as part of 1799 which is Special Trade Contractors, Not Elsewhere Classified. For the establishments with less than 20 employees, the sample was selected by sorting the establishments into State by SMSA by SIC by payroll sequences, and drawing a systematic sample of at least two establishments within each cell, with the probability of selection being proportional to the 1981 payroll. If the State-SMSA-SIC cell had two or less establishments in the frame, all establishments were selected (a 100-percent sample). A 100-percent sample was taken of the construction firms identified from the NC-9923, General Report, and of the transfers from other census trade areas. These latter cases were identified during the processing stages. These were caused either by changes of activity in the firm since the last updating of the classification file, or errors in the mailout classification. These cases were all added to the construction census, with certainty.

Estimation procedures for 1982 and 1977 data—Since all larger employer firms and some smaller ones were included in the census, sample estimation was required only for the universe of firms not selected with certainty. The published statistics are the totals of the estimates for the sampled firms and the

aggregates for the certainty (larger) firms. All estimates for 1982 and 1977 published here are simple unbiased estimates of the form:

$$x'_{c} = \sum_{i=1}^{n_{c}} x_{i}/p_{i}$$

where: x'c is the simple unbiased estimate of a characteristic for a publication cell.

x i is the reported value of a characteristic for an individual establishment in the publication cell.

p is the selection probability of that firm.

n c is the number of firms in the sample for the cell.

This method of estimation was used for all 1982 and 1977 characteristics. Before this formula was applied, it was necessary to convert into dollars those distributions of construction receipts which had been reported by the establishments as percentages—construction receipts by type of project, location of project, etc.

Reliability of employer statistics—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimates directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Although relative standard errors have been calculated for all of the published statistics, they are shown for each statistic only in the tables presenting detailed statistics. The other tables show relative standard errors only for some characteristics because of lack of space.

Separate measures of reporting and processing errors are not available. However, estimates which were subject to large errors of these types are likely to have been detected and corrected, or withheld from publication in the process of the review of the data for reasonableness and consistency. Other specific qualifications of the published data are indicated in footnotes to the tables.

The statistics in this report were based on data received by the time of final publication. Data were imputed for establishments that did not report by that date. Selected establishments were contacted again to obtain as much information on the telephone as possible. Late data received in early 1984 were substituted for imputed data when the difference between the two was significant. Some publication cells in which more than 50 percent of the data were imputed have been suppressed.

Nonemployer Firms

General—As described earlier, the information derived from the business income tax returns of all firms was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with firms without payroll were treated as nonemployers. The nonemployer construction firms were not required to file census reports.

For ''number of establishments,'' each separate income tax return was assumed to be an establishment. ''All business receipts'' was based on receipts information reported on the tax return. In 1982, this group accounted for 60 percent of the total number of construction establishments, but accounted for only 8 percent of all business receipts of all construction establishments.

Qualifications to the nonemployer data—Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1982 Census of Construction Industries was obtained from employer establishments primarily through the use of eight questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the three two-digit SIC groups (15, 16, and 17), and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted most of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were solicited from construction trade associations and appropriate advisory groups. The Census Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

DATA PROCESSING

The 1982 census report forms were mailed out in December 1982. Collection of these report forms, also by mail, was essentially completed in July 1983. They were mailed from and

returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters in Washington, D.C.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding) and imputation for missing items or for the small number of reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1982 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. Separate State codes were assigned based on this information.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected SCSA's and SMSA's.

DUPLICATION IN RECEIPTS

The aggregate of construction receipts reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work (and the receipts) of one firm may be subcontracted to other construction firms and also be included in the subcontractors' receipts. To avoid this duplication, a "net construction receipts" figure has been derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts.

Duplication in receipts between other construction and nonconstruction industries results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is defined in the 1982 Census of Construction Industries as equal to all business receipts less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, value added is defined as equal to all business receipts less land receipts, payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1982 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies), as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, D.C., 20233.

To discuss a special tabulation before submitting specifications, call 301-763-5435.

RELATIONSHIPS OF THE ECONOMIC CENSUSES TO CURRENT SURVEYS

The Census Bureau also conducts current surveys (monthly, quarterly, and annually) to keep abreast of the rapid changes in business conditions, new processes, new materials, and shifting demands of goods and services. The census universe provides the sampling frame, weights, and benchmarks on which some of these current surveys are based. The accuracy of the measures derived from these current surveys is directly related to the completeness of information provided in the censuses.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1982 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas, the construction census figures cover both new construction and

maintenance and repair work, but only for establishments classified in the construction industry. Force account construction activity—construction work performed by the labor force of a nonconstruction company for itself, or by other entities (Federal, State, or local governments) for themselves, or by property owners for themselves—probably accounts for more than half of the difference in the data of the two series of reports. Other factors contributing to the difference are that the census data do not include: (1) the value of materials supplied by the owners of projects, (2) the value of separate architectural and engineering services and, to a lesser extent, (3) the value of construction work performed for others by firms outside the scope of construction (manufacturers who install, lumber yards and other businesses, etc.).

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology. Their effect is not fully known.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** All employees (average) is the sum of construction workers during pay period including 12th of March, May, August, and November divided by 4, added to all others, March 12th.
- Represents zero.
- t Represents total construction receipts less payments for construction work subcontracted to others. (See Duplication in Receipts.)
- Represents all business receipts less payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from "all business receipts." (See Duplication in Receipts.)
- Possible duplication in data. (See Duplication in Receipts.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By State	By employ- ment size	By receipts size	By type, class, ownership, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—structures, machinery and equipment	3 1, 3	1	5	6		
equipment	3					
Capital expenditures: Total capital expenditures New structures—machinery and equipment Used structures—machinery and equipment	1, 3 3 3	1	5	6		
Communication services, payments for	2					
Employees: All employees—average number	1, 2 1, 2, 9 2	1	5	6		8
Employer costs for fringe benefits—legally required and voluntary expenditures	2		,			
Establishments: Number in business at end of year	2 1, 2, 4, 9	1, 9	5	6		8
Hours—construction workers: Total	1, 2, 9 2, 9	1, 9 9	5	6		
Inventories	4					
Materials, components, supplies, and fuels— payments for	1, 2	1	5	6		
Payroll: First quarter, all employees	2					
All employees	1, 2 1, 2 2	1	5	6		8
Power, fuels, and lubricants—payments for	2					
Profile of the industry—selected industry	12					
Proprietors and working postero						
Proprietors and working partners	2 13	13				
Receipts: All business receipts	2	13	5	6	11	
Construction receipts, total	1, 2, 4 2 2	1	5	6	2, 7, 10	8
Net construction receipts	1, 2 1, 2	1	5 5	6 6		8 8
Rental payments: Total	1, 2 2 2	1	5	6		
Repairs to structures and related facilities	2					
Repairs to machinery and equipment	2					
Storage capacity for fuels ³	2					
Subcontract work to others, payments for	1, 2	1	5	6		8

Note: Data for 1977 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction or maintenance and repair work. Ownership—private or government owned. ²Other business receipts and land receipts are shown separately for SIC's 1531 and 6552 only. ³Storage capacity for fuels shown only for SIC's 1611, 1622, 1623, and 1629.



Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors

CONTENTS

Page 111 IX 3 **TABLES** Statistics for Establishments With Payroll 8 9 10 Selected Statistics by Specialization in Types of Construction: 1982 11 12 15 15 Selected Industry Ratios by State: 1982 Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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APPENDIXES

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SUMMARY OF FINDINGS

Establishments classified in this industry are primarily engaged in setting and installing ceramic tile, marble, and mosaic, and in mixing marble particles and cement to make terrazzo at the site of construction. This industry also includes contractors engaged in fresco work and mantel work. For specific examples, refer to the 1972 Standard Industrial Classification (SIC) Manual and its 1977 supplement.¹

During 1982, there were 3,890 establishments with payroll classified in this industry.² All business receipts of these establishments amounted to \$1,211 million, of which \$1,191 million were receipts for construction work. Their payments for construction work subcontracted to others amounted to \$32.6 million, leaving net construction receipts of about \$1.2 billion. Value added for 1982 was \$666 million. (See Introduction and appendixes for explanation of terms.)

The establishments in this industry made payments of \$488 million for materials, components, and supplies purchased for use in construction work for others, purchased and subsequently provided to subcontractors for their use, purchased and then resold to others, and purchased and used in construction work for their own account. However, materials furnished to contractors by owners of projects are, of course, not included. Payments of \$24.5 million were also made for selected power, fuels, and

lubricants purchased during the year from other companies or received from other establishments of the parent company.

Establishments with 10 employees or more, while representing only 16 percent of the total number of employer establishments in this industry, accounted for 68 percent of all business receipts.

Total average employment in the industry showed an increase of 14 percent from 1977 to a total of 25 thousand employees. Total payroll for 1982 amounted to \$384 billion. Hours worked by construction workers during the first quarter of 1982 were 7.4 million hours, while hours worked during the third quarter were 8.2 million hours.

Payments of \$69.3 million for employer costs for fringe benefits (not included in payroll) represent expenditures during the year for legally required and voluntary fringe benefit programs for employees—such as employers' Social Security contributions, unemployment compensation, pension plans, and welfare plans.

The 1982 estimates for establishments with payroll in all of the construction industries are based on a probability sample consisting of about 172,000 construction establishments. The estimates for this particular industry are based on a sample of about 1,400 establishments.

The statistics reported by each establishment cover all of its activities, not just construction. Therefore, aggregates of such data for an industry reflect not only the primary construction activities of the establishments in the industry, but also their secondary construction activities and any nonconstruction activities.

All data shown are based on current dollars for the years specified and have not been adjusted for price changes or inflation between 1977 and 1982.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

²Limited data for establishments in this industry without payroll (nonemployers) will be included in the U.S. industry summary report to be published after the individual industry reports have been issued.

Table 1. General Statistics for Establishments With Payroll by State: 1982 and 1977

					1982			•
		Emplo	yees**	Pay	yroll			
Location of establishment	Number of establish- ments	All	Construction workers	All employees	Construction workers	Construction worker hours (thousands)	Total construction receipts	Net construction receipts†
	А	В	С	D	Е	F	G	Н
United States	3 890	25 434	21 695	383 985	306 334	31 072	1 190 627	1 158 013
AlabamaAlaskaArizonaArkansasCalifornia	50	242	210	2 926	2 310	320	10 209	9 942
	3	(D)	(D)	(D)	(D)	(D)	(S)	(D)
	111	806	680	8 038	6 041	794	25 686	25 342
	18	*95	*83	*1 148	*977	*219	*3 499	*3 469
	665	3 601	3 004	67 029	51 851	3 880	192 111	188 422
Colorado Connecticut Delaware District of Columbia Florida	32	298	259	6 347	5 313	412	18 504	18 248
	41	167	148	2 885	2 541	249	9 639	9 504
	11	61	45	1 192	748	77	3 078	2 888
	*2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	438	2 465	2 149	30 750	24 597	3 285	101 768	98 273
Georgia	91	622	578	8 095	7 025	741	28 640	28 257
	25	184	159	3 888	3 002	254	10 889	(D)
	*21	*21	*21	*83	*83	(S)	*509	*489
	92	1 533	1 331	22 926	19 951	1 519	65 156	64 050
	42	259	205	4 321	3 396	311	12 265	11 781
lowaKansasKentuckyLouisianaKanine	16	66	54	1 140	876	73	3 939	3 788
	*17	*47	*45	*605	*525	*59	*2 110	*1 997
	40	211	191	2 810	2 358	236	8 964	8 915
	74	782	686	10 994	8 700	1 004	31 246	30 380
	*6	*38	*24	*714	*507	*54	*2 234	*2 193
Maryland	69	359	299	5 693	4 510	524	17 917	17 412
	84	531	428	8 418	6 567	689	28 600	26 999
	121	515	415	9 374	7 710	594	28 460	27 768
	57	331	277	6 814	5 426	382	19 763	19 596
	26	111	88	1 061	817	117	3 375	3 341
Missouri Montana Nebraska Nevada New Hampshire	45	287	240	4 989	3 808	321	12 809	12 656
	*18	*48	*48	*385	*385	*62	*1 226	*1 220
	17	104	88	1 399	1 153	114	3 072	3 072
	24	115	93	1 965	1 512	128	6 546	6 455
	*17	73	62	(D)	476	55	2 922	2 862
New Jersey New Mexico New York North Carolina North Dakota	139	874	751	11 783	9 600	986	41 812	40 782
	31	*286	*242	2 509	1 762	220	6 692	6 609
	220	1 914	1 634	29 107	24 077	2 313	93 473	88 558
	119	722	585	7 373	5 258	953	25 920	24 465
	*3	(D)	*13	*199	*150	*23	*871	*823
OhioOklahomaOregonPennsylvaniaRhode Island	76	481	385	8 880	7 049	562	23 153	22 470
	49	228	189	4 002	2 926	255	13 442	12 788
	21	(D)	455	(D)	6 349	416	(D)	(D)
	125	748	645	12 746	10 517	1 076	41 004	39 949
	29	119	94	1 494	1 167	159	4 578	4 453
South Carolina South Dakota Tennessee Texas Utah	52	371	336	3 881	3 191	582	11 862	11 583
	4	6	6	55	55	8	217	(D)
	55	449	366	5 198	3 728	517	16 893	16 428
	392	2 813	2 498	42 347	34 502	4 009	133 929	130 632
	42	240	192	3 574	2 878	378	10 694	10 368
Vermont Virginia Washington West Virginia Wisconsin Wyoming	*7	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	97	643	536	7 842	5 777	808	24 940	24 078
	53	410	353	7 517	5 871	502	18 439	17 539
	*9	50	37	897	603	66	2 362	(D)
	80	521	402	9 395	6 889	636	32 177	31 296
	*3	(D)	18	(D)	375	38	1 155	1 148

		1982-	-Con.				1977					
Value added††	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Rental payments for machinery, equipment, and structures	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts	Value added††	Relative standard error of estimate (percent) for column—		Location of establish- ment	
	J	К	L	М	N	0	Р	Q	В	Н	М	
666 0 31	512 221	32 614	9 349	13 902	118 825	22 324	766 114	44 3 04 9	1	1	4	u.s.
5 421 (D) 14 512 *1 929 112 713	(S) 11 410 11 545	*267 (D) 344 *30 3 689	*9 (S) 286 *35 2 148	109 (S) 433 *40 1 977	1 266 (S) 3 326 *1 060 20 490	543 (D) 462 122 3 520	12 936 (D) 14 117 4 183 161 113	7 754 (D) 8 053 3 591 97 442	20 - 16 45 4	22 - 11 45 3	11 18 55 9	Ala. Alaska Ariz. Ark. Calif.
7 847 5 200 1 942 (D) 53 358	4 316 984 (D)	255 134 190 (D) 3 495	131 *61 *7 (D) 771	211 51 24 (D) 1 510	1 248 488 299 (D) 11 149	148 151 (D) 89 2 091	5 580 4 665 1 596 2 778 60 164	3 409 2 697 933 1 964 31 192	12 25 24 - 6	9 25 22 - 6	(W) 28 (W) - 14	Colo. Conn. Del. D.C. Fla.
15 209 7 990 *205 40 699 7 295	3 861 *284 25 086	383 (D) *20 1 106 484	186 449 *7 513 147	*109 63 - 297 258	1 615 483 *218 5 432 1 279	669 106 *69 756 282	14 804 4 010 *1 342 35 281 10 124	7 999 2 468 *840 18 982 6 501	15 15 42 4 18	12 - 56 4 17	41 21 - 12 37	Ga. Hawaii Idaho III. Ind.
2 350 *1 053 5 514 16 788 *1 228	*948 3 529 13 667	*151 *113 49 865 *40	(D) *22 58 477 35	*7 302 369 105	395 418 1 024 3 234 279	98 125 221 423 24	3 781 3 543 6 404 12 251 936	2 072 2 003 3 454 6 969 432	31 43 15 8 42	35 41 13 9 44	63 21 14 32	lowa Kans. Ky. La. Maine
9 976 14 300 16 151 12 474 1 710	12 967 11 754 (D)	505 1 601 691 167 *34	203 159 231 35 43	558 144 221 137 (D)	2 247 2 308 3 230 2 823 704	619 404 618 406 191	21 022 13 185 30 754 16 175 4 911	11 649 7 621 17 942 9 794 2 763	19 11 11 9 25	16 11 12 11 38	36 18 16 3	Md. Mass. Mich. Minn. Miss.
7 570 *660 2 141 3 974 1 318	*560 1 453 2 622	153 *6 - *91 60	120 - - 107 (D)	83 *7 (D) 52 -	907 *195 286 670 50	292 *27 42 219 (D)	11 647 *1 341 1 083 5 890 (D)	7 295 *692 639 3 504 (D)	16 48 27 23 22	13 47 19 28 16	5 63 - 29	Mo. Mont. Nebr. Nev. N.H.
23 346 4 104 48 874 12 820 *355	3 637 41 311 11 777	1 030 83 4 915 1 455 *47	80 73 722 214 *6	278 205 1 531 382	3 999 1 376 8 317 3 121 *36	443 192 1 210 832 *9	14 956 3 303 43 320 21 340 *269	8 616 2 766 26 331 11 361 *132	11 41 5 11	8 25 6 8 44	18 28 16 17	N.J. N. Mex. N.Y. N.C. N. Dak.
13 105 6 825 18 400 24 011 2 276	6 040 (D) 16 433	683 654 (D) 1 055 *125	128 74 7 107 *18	119 306 *177 419 *24	1 672 894 2 251 3 862 463	466 219 101 818 78	19 411 6 839 3 141 28 876 2 343	11 482 4 165 1 971 17 154 1 212	13 16 - 9 35	10 13 - 6 38	8 31 58 19 47	Ohio Okla. Oreg. Pa. R.I.
6 701 111 9 164 75 045 6 240	7 920 56 070	279 (D) 465 3 206 326	59 - 111 844 39	88 - 327 1 957 84	1 239 (D) 2 437 12 767 1 346	432 (D) 551 2 364 363	9 814 996 14 894 70 015 12 159	5 634 763 8 119 37 489 7 832	16 14 18 5	9 17 12	16 11	S.C. S. Dak. Tenn. Tex. Utah
(S) 12 516 9 353 1 628 18 145 598	1 197 14 210	(S) 862 900 (D) 881 *7	(S) 192 159 35 159 21	(S) 378 178 - 300 48	(D) 3 182 1 374 165 2 608 361	(D) 701 184 76 396 (D)	(D) 18 178 7 951 2 126 15 778 956	(D) 9 561 4 172 1 468 9 977 576	- 9 9 17 9 -	8 9 - 9 24	14	Vt. Va. Wash. W. Va. Wis.

Table 2. Detailed Statistics for Establishments With Payroll: 1982 and Earlier Census Years

ltern							ndard ei (percer	
· · · · · · · · · · · · · · · · · · ·	1982	1977	1972	1967	1982	1977	1972	1967
Number of establishments in business during year	3 890	3 891	4 270	4 984	3	3	5	4
Number of establishments in business at end of year	3 821	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Proprietors and working partners	1 760	2 433	2 917	3 979	5	5	6	6
All employees**	25 434	22 324	30 874	32 167	2	2	2	1
Construction workers: March May August November Average		17 921 19 383 19 857 19 092 19 084	25 002 26 206 27 547 26 119 26 600	26 573 27 978 29 400 27 080 28 254	2 2 2 2 2 2	2 2 2 2 2	3 3 3 3 3	1
Other employees: March	3 730	3 151	4 194	3 906	2	2	3	2
Construction worker hours (thousands): January to March April to June July to September October to December Total hours worked	7 850	(NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA)	2 2 2 2 2 2	(NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA)
Payroll, all employees Payroll, construction workers Payroll, other employees	383 985 306 334 77 651	255 475 207 643 47 832	260 053 213 439 46 614	191 657 160 562 31 072	1 1	1 1 1	2 3 3	1 1
First quarter payroll, all employees	86 668	55 474	(NA)	(NA)	2	1	(NA)	(NA)
Employer costs for fringe benefits	69 322 55 396 13 926	45 180 26 220 18 960	(NA) (NA) (NA)	(NA) (NA) (NA)	2 2 3	, 1 , 1	(NA) (NA) (NA)	(NA) (NA) (NA)
All business receipts Total construction receipts Receipts for work subcontracted in from others Land receipts1 Other business receipts	1 210 867 1 190 627 692 416 (NA) 20 240	788 747 766 114 534 006 (NA) 22 633	716 892 703 114 403 219 (NA) 13 778	562 614 555 714 316 714 (NA) 6 933	2 2 3 (NA) 7	1 1 2 (NA) 3	3 3 3 (NA) 7	1 1 2 (NA) 5
Net construction receipts†	1 158 013	750 078	684 738	545 310	1	1	2	1
Value added††	666 031	443 049	419 398	324 769	2	1	3	1
Selected payments Materials, components, and supplies ² Construction work subcontracted to others Selected power, fuels, and lubricants Electricity Natural gas Gasoline and diesel fuel (including gasohol) Other, including lubricating oils and greases	487 683 32 614	345 698 315 856 16 036 13 806 1 487 514 10 589 1 218	297 494 279 118 18 376 (NA) (NA) (NA) (NA) (NA)	237 868 227 447 10 419 (NA) (NA) (NA) (NA) (NA)	2 4 3 5 9 3 6	22823526	3 3 9 (NA) (NA) (NA) (NA) (NA)	1 5 (NA) (NA) (NA) (NA) (NA)
Storage capacity for fuels ³ (thousand gallons)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Rental payments for machinery, equipment, and structures For machinery and equipment For structures	9 349 3 609 5 739	4 527 1 684 2 843	(NA) 1 419 (NA)	(NA) 902 (NA)	3 6 5	2 3 3	(NA) 5 (NA)	(NA) 6 (NA)
Selected purchased services	15 324 7 429 1 070 6 824	13 572 5 850 734 6 989	(NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA)	3 3 6 4	3 2 5 5	(NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA)
Ownership of construction projects: Total construction receipts	1 190 627 116 546 1 074 080	766 114 108 388 657 727	703 114 171 306 531 808	555 714 (NA) (NA)	2 12 2	1 2 2	3 3 3	1 (NA) (NA)

¹Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

²For 1967 and 1972, includes data for power, fuels, and lubricants.

³Data were collected only for establishments classified as heavy construction contractors.

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1982 and Earlier Census Years

Item							ndard er (percer	
	1982	1977	1972	1967	1982	1977	1972	1967
STRUCTURES, MACHINERY, AND EQUIPMENT					!			
Beginning-of-year gross book value of depreciable assets Capital expenditures, other than land New Used Retirements and disposition of depreciable assets	108 216 13 902 10 939 2 962 3 292	(NA) 13 564 11 705 1 859 (NA)	(NA) 8 823 7 619 1 204 (NA)	(NA) 5 321 4 533 788 (NA)	3 6 6 15 10	(NA) 4 4 10 (NA)	(NA) 7 7 27 (NA)	(NA) 5 5 11 (NA)
End-of-year gross book value of depreciable assets	118 825	76 955	70 409	(NA)	3	2	3	(NA)
Depreciation charges during year	15 852	7 609	7 507	(NA)	3	2	4	(NA)
Structures, Additions, and Related Facilities								
Beginning-of-year gross book value of depreciable assets Capital expenditures, other than land New structures and related facilities Used structures and related facilities Retirements and disposition of depreciable assets	32 125 2 639 1 931 *708 362	(NA) 1 766 1 425 341 (NA)	(NA) *2 011 1 503 *508 (NA)	(NA) 1 669 1 344 325 (NA)	5 17 15 42 12	(NA) 16 8 24 (NA)	(NA) 41 23 59 (NA)	(NA) 13 10 17 (NA)
End-of-year gross book value of depreciable assets	34 402	21 501	21 971	(NA)	5	3	6	(NA)
Depreciation charges during year	3 197	917	1 580	(NA)	5	8	9	(NA)
Machinery and Equipment								
Beginning-of-year gross book value of depreciable assets	76 091 11 262 9 008 6 413 2 254 2 930	(NA) 11 799 10 281 8 468 1 518 (NA)	(NA) 6 812 6 116 (NA) 696 (NA)	(NA) 3 652 3 189 (NA) 463 (NA)	3 6 6 7 13 11	(NA) 7 4 5 10 (NA)	(NA) 9 5 (NA) 14 (NA)	(NA) 8 2 (NA) 14 (NA)
End-of-year gross book value of depreciable assets	84 423	55 454	48 438	(NA)	3	2	3	(NA)
Depreciation charges during year	12 654	6 692	5 927	(NA)	4	2	4	(NA)

Table 4. Value of Inventories for Establishments With Payroll: 1982 and 1981

[Thousand dollars. Detail mey not edd to total due to rounding. For meening of ebbreviations and symbols, see introductory text. For explanation of terms, see eppendixes]

. Item	Establishments with peyroll	Relative standard error of estimate (percent)
All establishments: Number Total construction receipts	3 890 1 190 627	3 2
Establishments with inventories: Number Total construction receipts Inventories':	1 065 678 391	9 2
End of 1982, total Value for establishments with LIFO reserve Amount of LIFO reserve Value for establishments with no LIFO reserve	30 260 (D) (D) (D)	5 - - -
End of 1981, total Value for establishments with LIFO reserve Amount of LIFO reserve Value for establishments with no LIFO reserve	30 219 (D) (D) (D)	3 - - -
Establishments with no inventories: Number Total construction receipts	2 825 512 236	2 3

¹Inventories et cost or market prior to any adjustment to correct to LIFO velues.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1982 and 1977

[Thousand dollars. Detail mey not edd to total due to rounding. For meaning of abbreviations end symbols, see introductory text. For explanation of terms, see appendixes]

					Establishm	ents with an	average of-			
Selected statistics	Total	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1982										
Number of establishments All employees** Peyroll, all employees Construction worker hours (thousands) All business receipts. Total construction receipts Net construction receipts†	3 890 25 434 383 985 31 072 1 210 867 1 190 627 1 158 013	2 634 5 126 50 323 5 934 219 987 218 343 212 402	636 4 239 54 165 5 114 173 194 168 804 164 216	383 5 108 81 389 6 259 249 433 244 223 237 957	184 5 282 100 346 6 982 568 252 281 938 413 555	39 2 588 51 620 3 276 (D) 144 116 (D)	12 3 090 46 141 3 506 (D) 133 202 129 882	1000000	1000000	-
Value added††	666 031 512 221 32 614 9 349 13 902 118 825	116 199 97 846 5 941 1 220 3 849 26 578	95 126 73 479 4 588 1 972 2 800 20 628	139 760 103 407 6 266 1 741 2 585 24 224	159 929 119 850 <u>12 499</u> <u>3 496</u> <u>4 175</u> 26 152	77 590 117 638 (D) (D) (D) 11 870	77 426 (0) 3 320 918 491 9 372	999999	999999	-
All employees** Total construction receipts Value edded††	22 324 766 114 443 049	5 103 184 723 96 847	3 815 119 548 67 016	5 032 162 438 95 226	5 696 199 765 120 265	2 023 72 075 63 696	655 27 567 (D)	(D) (D) (D)	⁷ -	=
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT) All employees** Net construction receipts† Capital expenditures, other than land	2 1 6	4 5 14	7 6 20	5 4 12	3 1 4	(W) - -	88 88 88	, 111		-

Note: Underscored data fields include deta from adjoining columns which have been withheld to evoid disclosing deta for individual compenies.

Table 6. Selected Statistics for Establishments With Payroll by Receipts Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

			Establishments with all business receipts of—								
Selected statistics	Total	Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	to	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1982											
Number of establishments All employees** Payroll, all employees Construction worker hours (thousands) All business receipts Total construction receipts Net construction receipts†	3 890 25 434 383 985 31 072 1 210 867 1 190 627 1 158 013	593 668 2 313 532 7 038 6 964 6 499	510 866 5 304 813 18 736 18 645 18 180	819 1 836 15 472 2 149 59 249 59 118 57 729	953 4 026 42 086 4 392 154 606 152 934 147 767	492 3 525 51 814 4 645 174 282 170 937 166 684	275 3 920 64 175 4 836 190 674 184 633 180 983	176 4 501 88 060 6 061 261 123 257 041 250 984	48 2 644 53 136 3 449 345 158 156 097 148 136	20 3 446 61 823 4 191 (D) 184 256 181 048	2 (D) (D) (D) (D) (D)
Value added††Payments for materials, components, supplies,	666 031	3 664	10 029	31 798	81 593	95 074	106 713	147 197	85 209	104 752	(D)
and fuelsPayments for construction work subcontracted	512 221	2 908	8 241	28 062	87 848	74 955	80 311	107 869	144 028	(D)	(D)
to others	32 614	465	465	1 388	5 166	4 252	3 650	6 057	7 981	3 208	(D)
structures Capital expenditures, other than land	9 349 13 902	*57 *22	99 *228	277 1 208	836 2 672	1 795 2 579	1 613 2 464	1 920 2 389	1 588 1 123	1 162 1 214	(D) (D)
End-of-year gross book value of depreciable assets	118 825	777	2 191	7 311	17 244	20 645	20 084	22 347	14 823	13 419	(D)
1977											
All employees** Total construction receipts Value added††	22 324 766 114 1 443 049	715 6 304 3 338	992 23 755 13 036	2 482 78 019 40 949	4 332 143 463 78 767	4 450 139 394 80 141	3 800 137 729 81 278	3 608 151 400 90 905	1 461 61 866 38 880	1485 124 186 115 756	(NA) (NA) (NA)
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** Net construction receipts† Capital expenditures, other than land	2 1 6	8 8 64	10 8 44	8 5 22	7 6 20	7 6 21	4 5 13	1 2 6	\$ \$ \$	(W) (W) (W)	- - -

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Data for this size class include establishments with receipts of \$10,000,000 or more, which were not tabulated separately in 1977.

Table 7. Construction Receipts for Establishments With Payroll by Type of Construction: 1982 and 1977

	Co	onstruction receipts		Relative	standard	error of
Type of construction	Total	New construction ¹	Maintenance and repair	estimat	te (perce column –	ent) for
	Α	В	С	A	В	С
1982						
Total construction receipts‡	1 190 627	969 821	220 805	2	2	3
Building construction Single-family houses	1 033 652 316 903	8 38 14 3 235 349	195 509 81 554	1 3	1 3	3
Single-family houses, detached	259 229 57 674 79 883	185 844 49 505 63 331	73 385 8 168 16 552	4 5 6	4 6 5	10
Other residential buildings	44 697 178 973 144 588	36 678 160 426 130 329	8 018 18 547 14 259	2 3	3	3 5 6 10 12 12 3
Bank buildings and other financial institutions Industrial buildings and warehouses Industrial buildings	34 385 107 741 101 753	30 097 94 712 89 347	4 287 13 029 12 406	2 2	2 2 2	4
WarehousesStores, restaurants, public garages, and automobile service stations	5 988 128 579 26 060	5 365 104 684 21 598	622 23 895 4 462	3456423222532	5 4 3	5 6 9 4 6 8
Educational buildings Hospitals and institutional buildings Amusement, social, and recreational buildings	55 837 68 875 7 724	45 809 55 799 6 477	10 028 13 076 1 247	3 6	4 3 7	8 6 11
Other nonresidential buildings	18 373	13 275	5 097	11	16	2
Nonbuilding construction Outdoor swimming pools Sewage treatment and water treatment plants	7 502 2 022 2 010	6 436 1 847 1 673	1 065 174 *337	9 27 12 6	10 30 8	21 31 59 7
Heavy industrial facilitiesOther nonbuilding construction	1 369 2 097	1 044 1 870	325 227	6 40	7 39	7 2 6
Construction work, n.s.k.	149 473	125 241	24 231	4	4	4
1977						
Total construction receipts‡	766 114	643 304	122 810	1	2	2
Building construction Single-family houses	676 372 263 139	562 875 219 083	113 497 44 056	1 3	1 3	2 5 7
Apartment buildings with two or more apartmentsOther residential buildingsOffice and bank buildingsIndustrial buildings and warehouses	78 272 30 527 57 011	65 294 23 655 47 000	12 978 6 872 10 011	4 4 2	3 2	15
Stores, restaurants, public garages, and automobile service stations	52 470 63 177	40 989 53 135	11 481 10 042	3	3	1
Religious buildings	12 990 57 397 49 324	10 841 50 775 41 679	2 149 6 622 7 645	1 1	3 1	4 6 3 3
Amusement, social, and recreational buildings Other nonresidential buildings	8 419 3 646	7 136 3 287	1 283 359	10	10	3 28
Nonbuilding construction Outdoor swimming pools	14 914 8 267	12 2 39 7 515	2 67 5 752	10 16	11 16	14 21
Other nonbuilding construction	6 647	4 724	1 923	8	8	18
Construction work, n.s.k.	74 840	68 151	6 689	7	7	8

¹For this industry, data for additions and alterations were not collected separately. These data are included with "New Construction."

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

	construction receipts by type of construction was not provided if	i table 7. Po	ir meaning of ac	breviations an	u symbols, see	e introductory	lext. For expla	mation of term	is, see appendi	resi		
					Total constru	ction receipts			Payments for construction		Relative dard e	
	Item	Number of establishments	All employees**	Payroll, all employees	For all types	For specialized type	Net construction receipts†	Value added††	work sub- contracted to others	(pe	estima rcent) olumn-	for
		A	В	С	D D	type E	F	G	H	В	D	Н
	All establishments	3 890	25 434	383 985	1 190 627	591 266	1 158 013	666 031	32 614	2	2	4
	Establishments not specializing by type Establishments specializing 51 percent or more	936 2 954	9 881 15 552	168 684 215 301	492 209 698 418	(NA) 591 266	479 417 678 596	273 226 392 805	12 792 19 822	3 2	2 2	5 5
	SINGLE-FAMILY HOUSES, DETACHED											
	All establishments specializing in type	1 757	5 450	6 3 45 6	226 754	188 871	219 948	124 895	6 8 0 6	5	4	12
	Establishments with— 100 percent specialization 90 to 99 percent specialization 80 to 89 percent specialization 70 to 79 percent specialization 60 to 69 percent specialization 51 to 59 percent specialization	700 325 246 302 159 25	1 480 963 961 1 245 692 108	15 551 11 590 10 787 14 919 8 901 1 707	61 750 39 728 36 626 52 519 30 572 5 558	61 750 36 707 29 976 38 423 18 989 3 024	60 905 38 716 35 102 50 301 29 410 5 512	35 202 22 359 19 813 28 175 16 342 3 003	845 1 011 1 524 2 218 1 161 *46	7 10 15 11 13 29	9 11 12 10 15 25	17 24 29 29 29 24 43
	SINGLE-FAMILY HOUSES, ATTACHED											
	All establishments specializing in type	119	454	4 602	18 912	16 218	18 185	10 094	*727	21	17	43
	Establishments with— 100 percent specialization	55 23 - 25 *15	169 *110 - *103 *72 -	1 969 911 - 849 *873	7 458 *4 037 - *3 902 *3 515	7 458 3 697 *2 926 *2 136	7 318 3 562 - *3 805 *3 500	3 653 2 131 - *2 346 *1 964	*140 *475 - *97 (S)	37 41 - 43 44	30 43 - 44 49	71 60 - 65 -
	APARTMENT BUILDINGS WITH TWO OR MORE APARTMENTS											
	Ali establishments specializing in type	10 9	6 5 3	10 449	33 2 7 9	26 69 5	32 818	19 129	461	14	13	22
	Establishments with — 100 percent specialization 90 to 99 percent specialization 80 to 89 percent specialization 70 to 79 percent specialization 60 to 69 percent specialization 51 to 59 percent specialization	44 *4 *17 18 22 3	173 79 71 93 177 60	2 710 1 257 1 290 1 545 2 558 1 088	8 983 *4 184 3 661 5 459 8 819 2 173	8 983 *3 908 2 930 4 012 5 698 1 162	8 794 (D) 3 634 5 251 8 801 (D)	5 446 *2 219 2 210 2 656 5 075 1 522	*189 (D) *27 208 *18 (D)	26 40 37 26 31 (W)	22 48 27 32 30 (W)	44 - 64 30 50
-	OFFICE BUILDINGS											
	All establishments specializing in type	71	1 120	21 053	61 654	44 042	6 0 70 2	35 128	9 5 2	9	9	30
	Establishments with — 100 percent specialization	27 *6 *13 14 *10	262 - *18 213 451 176	3 585 - *425 4 871 8 585 3 587	11 103 - *2 421 12 914 25 217 9 999	11 103 - *1 936 9 287 16 325 5 389	10 657 *2 387 12 834 (D) (D)	6 119 *1 069 8 385 13 812 5 742	*446 - *34 *80 (D) (D)	27 50 30 5 13	20 72 24 6 7	59 - 42 68 -
	STORES, RESTAURANTS, PUBLIC GARAGES, AND AUTOMOBILE SERVICE STATIONS											
	All establishments specializing in type	186	1 673	26 262	71 648	58 9 24	69 272	40 480	2 376	6	6	4
+	Establishments with— 100 percent specialization	84 25 *12 19 27 19	659 242 53 426 159 134	9 819 3 884 745 7 351 2 553 1 910	22 892 11 896 *1 908 21 189 8 242 5 521	22 892 10 851 *1 526 15 664 4 987 3 002	21 936 11 793 *1 903 20 345 7 816 5 479	13 463 6 283 *1 211 11 685 4 431 3 404	956 103 (S) 844 426 *42	11 12 38 10 28 24	12 15 41 11 17 26	7 9 - 11 10 41

Table 9. Quarterly Construction Worker Hours and Employment for Establishments With

		Average		January to	March	April to June			
Location of establishment	Number of establishments	number of construction workers	Construction worker hours (thousands)	Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)		
	А	В	С	D	E	F	G		
United States	3 890	21 695	31 072	20 333	7 3 63	21 557	7 850		
AlabamaAlaskaArizonaArkansasCalifornia	50	210	320	189	75	225	83		
	3	(D)	(D)	(D)	(D)	(S)	(S)		
	111	680	794	652	187	655	204		
	18	*83	*219	*71	*49	*78	*55		
	665	3 004	3 880	2 981	969	3 004	1 013		
Colorado Connecticut Delaware District of Columbia Florida	32	259	412	208	80	233	94		
	41	148	249	145	63	138	63		
	11	45	77	44	18	39	19		
	*2	(D)	(D)	(D)	(D)	(D)	(D)		
	438	2 149	3 285	2 167	867	2 167	808		
Georgia	91	578	741	530	176	571	191		
	25	159	254	151	58	167	65		
	*21	*21	(S)	*21	(S)	*21	(S)		
	92	1 331	1 519	1 375	394	1 298	376		
	42	205	311	192	77	200	78		
lowa	16	54	73	40	*13	43	*11		
	*17	*45	*59	*55	*15	*43	*16		
	40	191	236	180	56	204	70		
	74	686	1 004	630	231	694	251		
	*6	*24	*54	*27	*13	*27	*14		
Maryland	69	299	524	239	107	287	128		
	84	428	689	321	139	419	172		
	121	415	594	353	132	456	171		
	57	277	382	251	90	292	102		
	26	88	117	71	*23	101	28		
Missouri	45	240	321	235	74	249	84		
	*18	*48	*62	*51	(S)	*48	*17		
	17	88	114	90	30	90	28		
	24	93	128	78	28	93	33		
	*17	62	55	43	(D)	74	14		
New Jersey	139	751	986	633	224	758	257		
	31	*242	220	*205	50	165	46		
	220	1 634	2 313	1 405	500	1 637	577		
	119	585	953	588	237	578	235		
	*3	*13	*23	*14	*6	*15	*6		
OhioOklahomaOregonPennsylvaniaRhode Island	76	385	562	374	131	364	137		
	49	189	255	186	64	191	67		
	21	455	416	264	53 ((D)	119		
	125	645	1 076	589	241	593	257		
	29	94	159	79	*33	108	*48		
South Carolina South Dakota Tennessee Texas Utah	52	336	582	339	143	325	137		
	4	6	8	(D)	*1	(D)	3		
	55	366	517	366	124	387	136		
	392	2 498	4 009	2 407	951	2 438	988		
	42	192	378	173	88	174	86		
Vermont	*7 97 53 *9 80 *3	(S) 536 353 37 402 18	(S) 808 502 66 636 38	(S) 529 324 40 367 16	(S) 193 118 18 146	(S) 522 375 41 407 14	(S) 199 137 19 163 7		

¹Sum of construction workers during pay periods including 12th of March, May, August, and November.

Payroll by State: 1982

July to September		October to E	December	Relative standard error of estimate (percent) for column—									Logation	
Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)			Relative s	standard e	rror of estin	nate (perce	ent) for co	olumn—			Location of establish- ment
н	1	J	К	В	С	D	Ε	F	G	H	1	J	к	mont
22 215	8 189	21 226	7 669	1	1	1	2	1	2	1	2	2	2	U.S.
220 (S) 669 *80 2 858	83 (S) 208 *57 963	196 (D) 665 *84 2 853	77 (D) 193 *57 933	22 - 17 46 4	25 13 49 4	22 - 18 45 4	31 16 51 5	22 - 17 46 4	28 16 53 5	23 - 17 45 4	29 16 52 5	22 19 49 6	30 - 16 53 6	Ala. Alaska Ariz. Ark. Calif.
302 149 47 (D) 2 262	119 64 20 (D) 852	271 147 40 (D) 1 932	117 58 19 (D) 756	13 25 22 - 6	10 29 24 - 7	12 28 24 - 6	13 37 30 - 8	13 26 24 - 7	12 36 29 - 8	15 27 21 - 8	14 35 29 - 9	11 24 22 - 7	10 33 29 - 9	Colo. Conn. Del. D.C. Fla.
576 164 *16 1 356 215	186 61 (S) 385 80	602 150 *21 1 268 183	187 69 (S) 363 75	16 16 42 4 18	14 16 - 4 18	15 17 42 3 18	19 22 - 5 22	15 15 42 4 17	17 18 - 6 22	17 19 48 3 17	16 22 - 5 21	17 14 42 4 18	20 20 - 6 24	Ga. Hawaii Idaho III. Ind.
41 *41 195 684 *24	*13 *16 55 257 *15	90 32 170 722 22	35 *10 54 264 *11	28 43 16 8 41	32 48 17 10 45	39 44 17 8 43	58 64 23 12 58	36 44 16 8 43	54 64 21 11 55	38 43 16 9 41	55 64 24 12 53	17 40 17 8 40	24 73 24 11 52	lowa Kans. Ky. La. Maine
335 490 407 302 99	152 204 161 104 37	296 426 370 256 81	135 172 129 85 27	19 11 11 9 19	19 10 12 11 24	19 11 12 11 26	23 14 18 16 42	20 12 12 10 17	23 14 16 15 34	19 12 11 9 17	23 13 17 15 29	20 10 10 8 23	24 14 16 16 36	Md. Mass. Mich. Minn. Miss.
211 *48 82 93 80	78 *15 27 32 15	258 *44 86 100 45	83 (S) 27 35 (D)	16 48 27 23 21	15 58 24 26 14	15 53 26 23 14	20 28 35 -	16 48 26 24 27	18 72 31 34 37	15 48 28 23 28	19 74 30 35 37	22 48 27 24 14	24 31 34	Mo. Mont. Nebr. Nev. N.H.
793 *265 1 812 571 *14	260 57 677 248 *6	741 *318 1 625 566 *8	243 65 558 231 (S)	11 47 5 12 45	12 25 6 11 54	12 45 5 12 47	15 31 8 14 67	12 36 6 12 44	14 33 8 13 62	13 48 5 12 47	15 30 7 13 67	10 56 5 12 46	14 31 8 15	N.J. N. Mex. N.Y. N.C. N. Dak.
399 180 (D) 692 85	145 63 123 309 *37	400 178 (D) 659 98	147 60 120 267 *40	12 17 7 9 34	12 17 12 9 40	13 19 12 9 33	16 24 14 12 49	13 19 - 9 34	15 24 15 11 46	13 16 - 10 38	15 24 14 11 51	12 19 - 9 34	15 26 15 12 47	Ohio Okla. Oreg. Pa. R.I.
353 (D) 373 2 517 202	160 2 137 1 044 102	318 5 318 2 529 204	140 (S) 118 1 024 101	17 14 20 5 14	16 22 17 5	16 - 20 5 17	17 60 21 6 19	17 - 20 5 14	17 32 20 6 16	24 - 21 5 12	24 30 22 6 15	16 17 22 5 13	20	S.C. S. Dak. Tenn. Tex. Utah
(S) 523 355 33 407 19	(S) 204 131 *14 164 10	(S) 524 321 33 409 22	(S) 212 114 13 162	10 8 24 8 23	10 9 23 9 23	11 8 22 9 26	13 13 32 13 34	11 10 21 8 30	13 13 29 12 39	10 9 27 9 22	13 12 45 12 27	- 11 8 27 8 19	13 12 34 12 22	Vt. Va. Wash. W. Va. Wis. Wyo.

Table 10. Construction Receipts for Establishments With Payroll by Location of Construction Work: 1982 and 1977

Location of construction work		Construction work done by establishments located in this State		Construction work done by establishments not located in this State		1977 construction	Percent change 1982/	Relative stand error of estim (percent) for column—		nate or
	receipts for work done in this State	Number	Construction receipts	Number	Construction receipts	receipts for work done in this State	1977 (col A÷F)	,	JIGITIT —	
	А	В	С	D	Е	F	G	Α	С	E
United States	1 190 627	3 809	1 062 398	792	128 228	766 114	55.4	2	2	2
AlabamaAlaskaArizonaArkansasCalifornia	16 960 (D) (D) 5 890 200 092	50 3 106 18 662	(D) (D) (D) *3 378 189 723	17 4 6 25 14	(D) (D) (D) 2 512 10 369	12 961 2 800 14 415 4 281 162 716	30.9 (D) (D) 37.6 23.0	10 - - 29 4	- - 42 4	- - 13 2
Colorado Connecticut Delaware District of Columbia Florida	17 686 11 609 3 683 (D) 109 849	29 41 *11 *2 438	17 222 9 158 2 938 (D) 100 443	*9 21 7 20 14	464 2 450 744 (D) 9 406	5 523 5 191 1 874 6 172 60 800	220.2 123.6 96.5 (D) 80.7	10 21 19 - 6	10 24 24 - 7	15 18 6 - 2
Georgia	30 496 (D) *575 58 205 14 679	91 25 *21 87 42	24 705 10 889 *491 55 272 12 140	35 *16 *6 34 18	5 790 (D) *84 2 933 2 538	14 942 4 016 *1 269 37 137 10 848	104.1 (D) -54.7 56.7 35.3	10 - 49 5 14	13 16 54 5 16	9 -53 15 1
lowa Kansas Kentucky Louisiana Maine	3 077 3 552 11 294 26 562 (D)	15 *17 39 73 *6	2 891 *2 081 8 318 23 143 (D)	*12 *13 32 17 4	186 1 471 2 975 3 418 6 542	4 083 5 653 7 172 12 585 1 008	-24.6 -37.2 57.5 111.1 (D)	32 25 13 12	35 43 12 14	13 10 11 2 7
Maryland	18 718 23 523 28 369 18 325 *3 102	69 83 106 57 21	14 642 22 227 25 369 18 325 *2 700	13 23 26 - 5	4 075 *1 296 2 999 - 402	16 224 10 788 30 314 14 319 5 197	15.4 118.0 -6.4 28.0 -40.3	15 13 11 12 46	19 14 12 12 52	3 42 33 - 4
Missouri	12 394 (D) 3 081 8 267 3 273	45 *18 17 24 *17	11 060 (D) 3 003 6 532 2 881	*17 - *15 6 *11	*1 334 - *78 *1 735 *391	9 209 *1 631 1 254 7 027 (S)	34.6 (D) 145.7 17.6 (S)	14 - 18 24 17	16 - 18 31 16	47 - 57 41 44
New Jersey	44 616 5 757 78 233 22 474 1 914	138 31 212 119 *3	37 298 (D) 73 923 21 718 833	24 *1 18 19 *10	7 318 (D) 4 309 756 1 080	16 011 3 487 41 975 20 358 447	178.7 65.1 86.4 10.4 328.2	7 - 7 8 17	8 30 7 8 38	2 - 23 4 4
OhioOklahomaOregonPennsylvaniaRhode Island	21 134 17 688 (D) 33 731 3 130	76 49 16 114 29	20 650 12 925 (D) 31 403 3 130	15 25 3 30 -	483 4 762 (D) 2 328	19 414 8 178 3 309 25 737 1 892	8.9 116.3 (D) 31.1 65.4	11 10 - 7 32	11 13 - 8 32	2 2 - 6 -
South Carolina South Dakota Tennessee Texas Utah	13 188 (D) 19 229 125 027 9 495	52 4 53 386 41	11 537 (D) 14 522 119 624 9 495	8 - 43 20 -	1 651 4 706 5 402	11 583 1 111 14 446 67 815 12 057	13.9 (D) 33.1 84.4 -21.2	8 14 5 15	9 18 5 15	6 - 3 6 -
Vermont	(D) 28 251 17 421 3 393 26 385 1 884	*7 96 53 *9 75 *3	*102 22 629 14 795 2 301 22 766 1 117	1 41 *19 14 13 40	(D) 5 622 (S) 1 091 3 619 767	369 20 866 7 395 2 614 12 879 1 218	(D) 35.4 135.6 29.8 104.9 54.7	7 15 13 11 17	62 9 12 19 12 25	6 - 9 (W) 32

Table 11. All Business Receipts for Establishments With Payroll by Kind of Business Activity: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	All business re	Relative standard error o estimate (percent)		
	1982	1977	1982	1977
All kinds of business	1 210 867	788 747	2	1
General building contractor	2 580	25 216	8	7
	*172	(NA)	52	(NA)
	6 189	4 502	3	1
	*168	(NA)	60	(NA)
	*1 874	(NA)	53	(NA)
Concrete contractor	805	(NA)	12	(NA)
	492	(NA)	29	(NA)
	*261	(NA)	54	(NA)
	45 754	37 210	5	4
	1 592	2 070	15	9
Iron work contractor	*434	(NA)	56	(NA)
	2 575	(NA)	37	(NA)
	17 599	2 852	8	2
	507	(NA)	20	(NA)
	*162	(NA)	48	(NA)
Plastering contractor Roofing contractor Swimming pool contractor Terrazzo contractor Tile contractor, ceramic	2 924	(NA)	24	(NA)
	347	(NA)	9	(NA)
	288	(NA)	8	(NA)
	94 394	62 213	5	2
	894 179	580 858	2	2
Waterproofing, damproofing, and fireproofing contractor Other types of contracting Manufacturing Real estate agents and managers Retail trade Wholesale trade Other activities	660 76 107 970 *476 6 410 2 663 50 285	(NA) (NA) 4 783 (NA) 9 407 4 466 55 170	26 3 33 63 16 7 38	(NA) (NA) 3 (NA) 5 9

Table 12. Profile of Establishments With Payroll in This Industry: 1982 and Earlier Census Years

[For meaning of abbreviations and symbols, see Introductory text. For explanation of terms, see appendixes]

Selected statistics	1982	1977	1972	Relative standard error of estimate (percent) for 1982
AVERAGE PER ESTABLISHMENT				
Number of employees**	6.5 5.6 1.0 98.7 78.8 20.0	5.7 4.9 .8 65.7 53.4 12.3	7.2 6.2 1.0 60.9 50.0 10.9	2 2 2 1 1
All business receipts	311.3 306.1 131.7 8.4 3.6 30.6	202.7 196.9 84.7 4.1 3.5 19.8	167.9 164.7 65.4 4.3 2.1 16.5	2 2 2 4 6 3
AVERAGE PER EMPLOYEE Payroll, all employees	15.1 47.6 26.2	11.4 35.3 19.9	8.4 23.2 13.6	1 2 2
AVERAGE PER CONSTRUCTION WORKER				
Construction worker wages	14.1 54.9 1.4	10.9 40.1 (NA)	8.0 26.4 (NA)	1 2 2
AVERAGE PER OTHER EMPLOYEE				
Other employee salaries \$1,000	20.8	15.2	11.1	1
Payroll, all employees	.320 .430 .030 .010	.333 .430 .021 .018 .006	.370 .397 .026 .013 (NA)	1 2 4 6 3

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

					Average per dollar of total construction receipts					
Location of establishment	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker (thousands)	Total construction receipts per construction worker (\$1,000)	Payroll, all employees	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Capital expenditures, other than land	Rental payments for machinery, equipment, and structures	
United States	6. 5	15.1	1.4	5 4. 9	.323	.430	.027	.012	.008	
AlabamaAlaskaArizonaArkansasCalifornia	4.8 (D) 7.2 *5.3 5.4	12.1 (D) 9.9 *12.1 18.6	1.5 (D) 1.2 *2.6 1.3	48.6 (D) 37.8 *42.2 64.0	.287 (D) .313 *.328 .349	(D) (S) .444 *.442 .405	*.026 (D) .013 *.009 .019	.011 (S) .017 *.011	*.001 (S) .011 *.010	
Colorado Connecticut Delaware District of Columbia Florida	9.3 4.1 5.5 (D) 5.6	21.3 17.3 19.5 (D) 12.5	1.6 1.7 1.7 (D) 1.5	71.4 65.1 68.4 (D) 47.4	.343 .299 .387 (D) .302	.572 .448 .320 (D) .462	.014 .014 .062 (D) .034	.011 .005 .008 (D) .015	.007 *.006 *.002 (D) .008	
Georgia	6.8 7.4 *1.0 16.7 6.2	13.0 21.1 *4.0 15.0 16.7	1.3 1.6 (S) 1.1 1.5	49.6 68.5 *24.2 49.0 59.8	.283 .357 *.163 .352 .352	.457 .355 *.558 .385 .375	.013 (D) *.039 .017 .039	*.004 .006 - .005 .021	.006 .041 *.014 .008 .012	
lowa Kansas Kentucky Louisiana Maine	4.1 *2.8 5.3 10.6 *6.3	17.3 *12.9 13.3 14.1 *18.8	1.4 *1.3 1.2 1.5 *2.3	72.9 *46.9 46.9 45.5 *93.1	.289 *.287 .313 .352 *.320	(D) *.449 .394 .437 *.433	*.038 *.054 .005 .028 *.018	*.003 .034 .012 *.047	(D) *.010 .006 .015 *.016	
Maryland	5.2 6.3 4.3 5.8 4.3	15.9 15.9 18.2 20.6 9.6	1.8 1.6 1.4 1.4 1.3	59.9 66.8 68.6 71.3 38.4	.318 .294 .329 .345 .314	.424 .453 .413 (D) (D)	.028 .056 .024 .008 *.010	.031 .005 .008 .007 (D)	.011 .006 .008 .002 .013	
Missouri	6.4 *2.7 6.1 4.8 *4.3	17.4 *8.0 13.5 17.1 (D)	1.3 *1.3 1.3 1.4	53.4 *25.5 34.9 70.4 47.1	.389 *.314 .455 .300 (D)	.460 *.457 .473 .401 (D)	.012 *.005 - *.014 .021	.006 *.006 (D) .008	.009 - .016 (D)	
New Jersey	6.3 *9.2 8.7 6.1 (D)	13.5 *8.8 15.2 10.2 (D)	1.3 *.9 1.4 1.6 *1.8	55.7 *27.7 57.2 44.3 *67.0	.282 .375 .311 .284 *.228	.419 .543 .442 .454 *.537	.025 .012 .053 .056 *.054	.007 .031 .016 .015	.002 .011 .008 .008 *.007	
OhioOklahomaOregonPennsylvaniaRhode Island	6.3 4.7 (D) 6.0 4.1	18.5 17.6 (D) 17.0 12.6	1.5 1.3 .9 1.7 *1.7	60.1 71.1 (D) 63.6 48.7	.384 .298 (D) .311 .326	.406 .449 (D) .401 .475	.029 .049 (D) .026 *.027	.005 .023 (D) .010 *.005	.006 .006 (D) .003 *.004	
South Carolina South Dakota Tennessee Texas Utah	7.1 1.5 8.2 7.2 5.7	10.5 9.2 11.6 15.1 14.9	1.7 1.3 1.4 1.6 2.0	35.3 36.2 46.2 53.6 55.7	.327 .253 .308 .316 .334	.413 .465 .469 .419 .475	.024 (D) .028 .025 .030	.007 - .019 .015 .008	.005 - .007 .006 .004	
Vermont	(S) 6.6 7.7 *5.6 6.5 (D)	(S) 12.2 18.3 17.9 18.0 (D)	(S) 1.5 1.4 1.8 1.6 2.1	(S) 46.5 52.2 63.8 80.0 64.2	(S) .314 .408 .380 .292 (D)	(S) .470 (D) .507 .442 .475	(S) .035 .049 (D) .027 *.006	(S) .015 .010 - .009 .042	(S) .008 .009 .015 .005	

APPENDIX A. Expianation of Terms

Construction—Is composed of three broad categories: (1) new construction, (2) additions and alterations, and (3) maintenance and repair. "New construction" includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators and escalators. "Additions and alterations" includes construction activity making structural changes to existing facilities. "Maintenance and repair" includes the restoration of existing buildings or other structures or their service facilities, including the replacement of integral parts. Repainting, repapering, reroofing, etc., are also included.

Construction includes:

- special trade contracting such as electrical work, painting, and carpentering on mobile structures (trailers, mobile homes, and ships).
- support activities by construction contractors on mineral properties, except the following: sinking mine shafts; tunneling and shoring mines; erection, repairing and dismantling of drilling rigs; and building well foundations.
- the physical development of land for purposes other than agriculture.
- demolition of existing structures.

Construction does not include:

- shipbuilding.
- manufacturing of other mobile structures.

Number of establishments in business during year—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Number of establishments in business at end of year—Includes all full-year or part-year establishments that were in business at the end of 1982.

Proprietors and working partners—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners. The partnership factor was based on information received during a large-scale test conducted in prior years.

All employees—Comprised all full-time and part-time employees on the payrolls of construction establishments who worked for received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid-sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are excluded.

Total employment is calculated for each establishment and is derived by summing the construction workers data reported for March, May, August, and November, dividing by 4 and adding to it the number of other employees reported for March.

This approach was designed to simplify the questionnaire format and the reporting requirements of respondents. The industry average of these four selected pay periods approximates very closely the average employment for the year that would be obtained by using pay periods in all 12 months for almost all of the construction industries.

Construction workers—Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working supervisor level are excluded from this category but are included in the "other employees" category.

Other employees—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working supervisor level.

Construction worker hours—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1982 and are published in the detailed statistics tables.

Payroll—Includes the gross earnings paid in the calendar year 1982 to all employees on the payroll of construction establishments. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick-leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Payroll data were collected and tabulated for the employment categories described above and separately for the first quarter of 1982.

Payroll data for auxiliary establishments of multiestablishment companies are not included in these totals. Selected data for these types of establishments are found in the industry summary report and the 1982 Enterprise Statistics reports.

Employer costs for fringe benefits—Represents expenditures made by the employer during 1982 for legally required and voluntary fringe benefit programs for employees. These include employers' Social Security contributions, unemployment compensation, workers' compensation, State temporary disability payments, union negotiated benefits, life insurance premiums, pension plans, insurance premiums on hospital and medical plans, and welfare plans.

All business receipts—Includes all receipts from general contracting, special trade contracting or subcontracting, and land development and improvement work. It also includes all receipts from the sale of land (not recorded as fixed assets of the reporting establishments) and buildings built for sale. All other receipts from the reporting establishment's other business operations (rental of equipment to others, wholesale or retail sales, etc.) are also included.

Money obtained during the year in the form of construction loans is not treated as receipts, nor is money realized from the sale or other disposition of the establishment's fixed assets.

Also excluded are receipts from operations in foreign countries and nonoperating income such as interest and dividends.

All business receipts are broken down in the following detail:

Total construction receipts—Includes all receipts during 1982 for construction work performed by general contractors, special trades contractors or subcontractors, and for land development and improvement work. Included are receipts for maintenance and repair construction work, as well as for new construction and additions and alterations. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include in this item their 1982 receipts from the sale of buildings and other structures built for sale, excluding from these receipts the value of the land (see ''land receipts'' below) but including the value of any improvements an establishment made to the land. Builders who traded a new home or other building for an existing one were to include the estimated value of the trade-in.

Also included in construction receipts were fees received as sponsors of joint ventures and fees received as agents for owners (for construction work).

Excluded were receipts for separately definable architectural and engineering work done by the reporting establishment for others and receipts from the rental of equipment to others (see "other business receipts" below).

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies for construction purposes were instructed to include as construction receipts both the receipts for the installation and the receipts for the value (selling price) of the items installed. (Receipts for the selling price of items sold but not installed were to be included in "other business receipts.")

Receipts for work subcontracted in from others—Covers receipts during 1982 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total construction receipts accounted for by such work, and the percentages reported were applied to the reported construction receipts to develop a value for this item.

Land receipts—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in construction receipts.)

Other business receipts—Includes business receipts not reported as construction receipts or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Net construction receipts—Derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Value added—Derived for each establishment, value added is equal to all business receipts, less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, value added is modified to be equal to all business receipts less land receipts; payments for construction work subcontracted to others; and payments for materials, components, supplies, and fuels. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Selected payments—Represents the total of payments for materials, components, and supplies; payments for construction work subcontracted to others; and payments for selected power, fuels, and lubricants. Capital expenditures and rental payments for machinery, equipment, and structures are shown elsewhere.

Payments for materials, components, and supplies include:

- total payments made by the reporting establishments during 1982 for the purchase of all materials, components, and supplies, except fuels, used for construction. (Supplies include expendable tools charged to current accounts.)
- freight and other direct charges incurred by the reporting establishment in acquiring the materials, components, and supplies are also included, as are the value of materials, components, and supplies obtained from other establishments of the respondent's company. Payments represent the amount paid after discounts.
- payments for materials, components, and supplies used by the reporting establishments in the construction of new plants or equipment for themselves, which are chargeable to their fixed assets accounts, are included in this item as are payments for materials bought and resold to others.
- payments made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Payments for materials, components, and supplies include only payments for physical goods and represent the amount paid after discounts.

Excluded from this item are:

- services such as advertising, telephone, telegraph and cable, insurance, developmental and research services of engineering, management, marketing, and other professional consultants, unless their costs are included in the prices paid for materials.
- overhead items such as depreciation charges against plant and equipment, rent and rental allowances, interest payments, royalties, patent fees, payments for land, rental of construction machinery or equipment, and construction work let out to other construction contractors.
- materials furnished to contractors by the owners of projects.

Payments for construction work subcontracted to others include:

- all payments made during 1982 for construction work subcontracted out to other construction contractors.
 General contractors were instructed to include payments to subcontractors. Builders were instructed to include payments made to general contractors and also payments made directly to subcontractors.
- special trade contractors were instructed to include payments made to other subcontractors. The payments made by the reporting establishment for its purchases of materials, components, and supplies are not included here, even if they were provided to a subcontractor for his use. Such purchases are reported under a separate category, "payments for materials, components, and supplies." However, if payments to subcontractors covered materials purchased directly by the subcontractors, then the total of such payments (including material charges) should have been reported in this item.

Excluded from this item are:

 payments made for the rental of construction machinery or equipment.

Payments for selected power, fuels, and lubricants include:

- payments made for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the parent company.
- payments made for natural and manufactured gas, fuel oil, coal and coke products, etc.

Dollar amounts include freight and other direct charges.

Storage capacity for fuels—Data for storage capacity for fuels were collected from heavy construction contractors, other than building construction contractors. Data are published in the detailed statistics tables for the heavy construction industries, i.e., SIC 1611, SIC 1622, SIC 1623, and SIC 1629.

Rental payments for machinery, equipment, and structures—Includes all payments made during 1982 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes payments for the rental of land. It also excludes payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized. Such payments are included in "capital expenditures." It also excludes payments made under agreements which, in effect, are true subcontract construction arrangements; such payments are included in payments for "construction work subcontracted to others."

Selected purchased services—Includes all payments made during 1982 for communication services purchased from other companies or from other establishments of the parent company. It also includes the cost of all repairs made to structures and equipment by outside firms, or from other establishments of the parent companies. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increases the value of property, or the cost of adapting it for another use.

Fixed assets and depreciation—Refers to the value of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on fixed assets and depreciation were collected separately for: (1) structures, additions, and related facilities; (2) machinery and equipment; and (3) the total of both.

Respondents were asked to report the gross book valueacquisition cost (original cost or other basis) at the beginning and at the end of 1982. They were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1982.

Capital expenditures — Refers to all costs actually incurred during 1982 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment. Included are payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized.

Respondents were instructed not to include any expenditures actually made prior to, or after 1982. For example, if they began construction of a building for an establishment's own use before 1982 and did not complete it until after 1982, they were to report only those costs actually incurred during 1982.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

- New structures and related facilities—Includes the total expenditures during 1982 for new buildings and structures, major additions and alterations to buildings and structures, and other facilities for the reporting establishment's use (such as roads, docks, tracks, parking lots, and fences). It excludes expenditures for land.
- New machinery and equipment—Includes expenditures for new machinery and new equipment. This item also includes capitalized repairs and improvements to used machinery and equipment.
- New automobiles and trucks intended primarily for highway use—Includes expenditures for new automobiles and trucks and capitalized repairs and improvements to used automobiles and trucks.
- Used structures and related facilities—Covers expenditures for used structures and related facilities acquired from others.
- Used machinery and equipment—Includes expenditures for used machinery and equipment acquired from others, including automobiles and trucks.
 Capitalized repairs and improvements to such equipment are reported as new machinery and equipment.

Value of inventories—Includes all of the materials and supplies that are owned and located within the United States. Excludes materials which are owned by others, but held by the reporting establishment.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Establishments building structures on their own land for sale (operative builders) were instructed to include the value of materials on hand at the end of the year but not to include the structures not yet sold or under construction.

Land subdividers and developers were instructed to include the value of materials on hand at the end of the year, but not include land not yet sold or under construction.

Ownership of construction projects—This item shows the distribution of construction receipts by ownership of the project—Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken and not to the financing. Government owned projects cover those owned by the Federal, Commonwealth, or local governments including public authorities and special districts.

Types of construction — This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1982. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. However, complex projects consisting of two or more types of buildings, structures, or other facilities are difficult to classify because sufficient information is seldom available. Therefore, respondents were told to classify complex projects by the major function of the total complex.

In addition, heavy construction contractors and special trade contractors were requested to report the percentage of construction receipts derived from new construction work, including additions and alterations, and from maintenance and repair work for each of these types. General building contractors were requested to report the percentage of construction receipts derived from new construction work, from additions and alterations, and from maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of new construction, additions and alterations, and maintenance and repair.

Building construction:

- Single-family houses, detached—Includes all residential buildings constructed for one family use.
- Single-family houses, attached (includes townhouses)—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- Apartment buildings with two or more apartments— Includes high-rise, low-rise, or any structures other than containing two or more housing units.
- Other residential buildings—Includes hotels, motels, dormitories, and other nonhousekeeping residential structures.
- Bank buildings and other financial institutions— Includes all buildings which are used primarily to house banks or other financial institutions.
- Warehouses—Includes commercial warehouses, cold storage plants, grain elevators, miniwarehouses, and other storage buildings.
- Farm buildings, nonresidential—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- Industrial buildings—Includes all industrial buildings
 and plants which are used to house production and
 assembly activities. Note that heavy industrial
 facilities such as blast furnaces, petroleum refineries,
 chemical complexes, etc., are NOT included in this
 category, but are shown under nonbuildings
 construction.
- Office buildings—Includes all buildings which are used primarily for office space or for government administrative offices.
- Other commercial buildings such as stores, restaurants, and automobile service stations— Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades.
 For example, complete shopping centers, department stores, drug stores, restaurants, publicing garages, and auto service stations.
- Religious buildings—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.

- Educational buildings—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- Hospitals and institutional buildings—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- Amusement, social, and recreational buildings—
 Includes buildings which are used primarily for entertainment, social, and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- Other nonresidential buildings—Includes buildings which are not classified elsewhere, such as fire stations, bus and air passenger terminals, hangars, etc.

Nonbuilding construction:

- Outdoor swimming pools—Includes wading pools and reflecting pools.
- Elevated highways—Includes roads, highways, and causeways built on structural supports.
- Bridges Includes viaducts, trestles, and overpasses.
- Tunnels—Includes highway, pedestrian, and railway tunnels, etc.
- Railroad construction—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- Subway construction—Includes urban mass transit subway systems above or below ground.
- Dam and reservoir construction—Includes hydroelectric, water supply, and flood control dams and reservoirs.

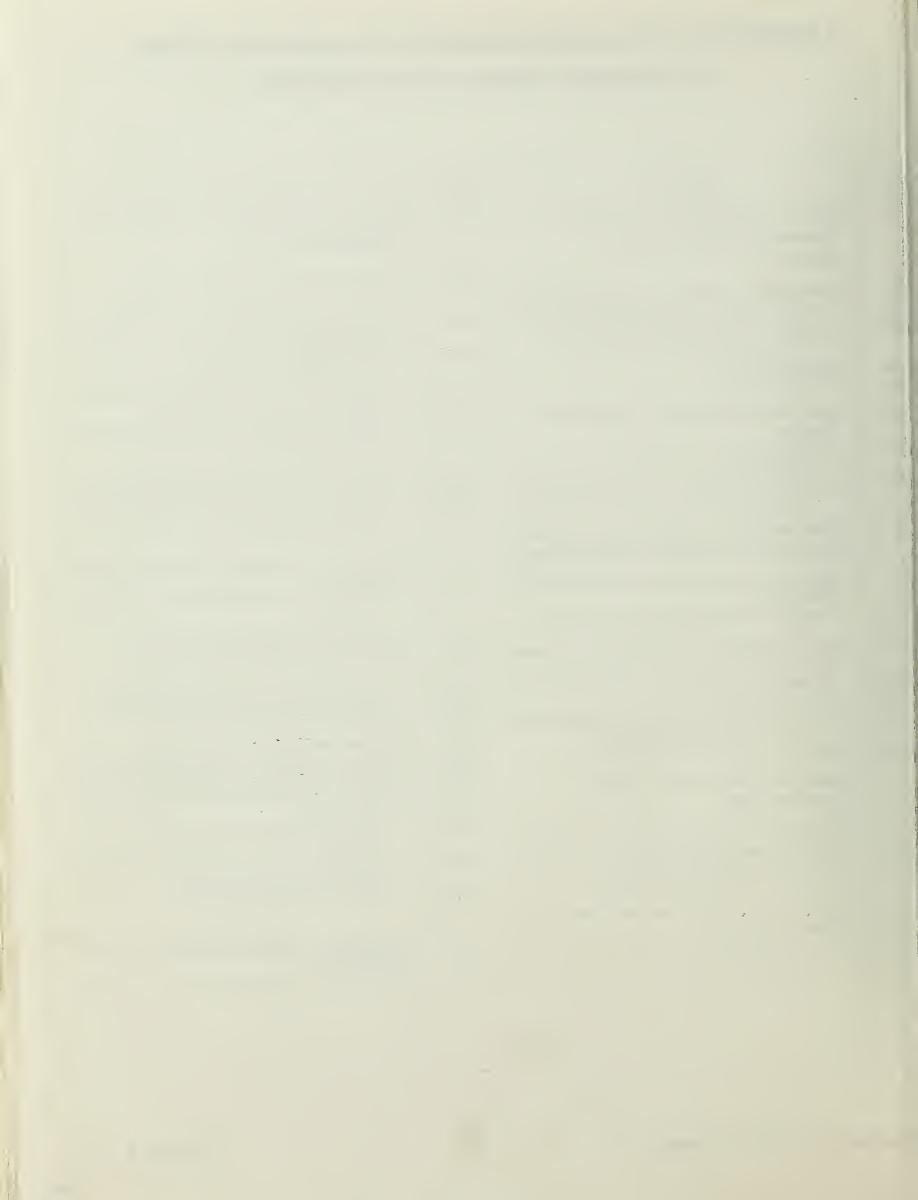
- Marine construction—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- Harbor and port facilities Includes docks, piers, and wharves.
- Conservation and development construction— Includes land reclamation, irrigation projects, drainage canals, dikes, and levees.
- Power and communication transmission lines, towers, and related facilities—Includes telephone and telegraph lines, television and radio towers, electric light and power facilities.
- Power plants, except nuclear—Includes electric and steam generating plants.
- Power plants, nuclear—Includes atomic energy plants and nuclear reactors.
- Sewers, sewerlines, and related facilities—Includes sanitary and storm sewers and related facilities.
- Sewage treatment plants—Includes sewage treatment and waste disposal plants.
- Water mains and related facilities Includes water supply systems and related facilities.
- Water treatment plants—Includes water filtration and water softening plants.
- Pipeline construction other than sewer or waterlines—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- Blast furnaces, petroleum refineries, chemical complexes, etc.—Includes coke ovens, and mining appurtenances such as tipples and washeries.
- Other nonbuilding construction Includes all types of nonbuilding construction, not included elsewhere.

Location of construction work—This item includes data for each State in which respondents engaged in construction work and the extent (percent of construction receipts) of that work.



APPENDIX B. Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
	BUILDERS	173	Electrical Work Special Trade Contractors
152	General Building Contractors — Residential Buildings	1731	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	174	
1522	General Contractors — Residential Buildings,	1/4	Masonry, Stonework, Tile Setting, and Plastering Special Trade Contractors
	Other Than Single-Family Houses	1741	Masonry, Stone Setting, and Other Stoneworl
153	Operative Builders		Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical and Insulation
154	General Building Contractors—Nonresidential		Work Special Trade Contractors
	Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Specia
1541	General Contractors-Industrial Buildings and		Trade Contractors
	Warehouses	175	Carpentering and Flooring Special Trade Contractors
1542	General Contractors - Nonresidential Buildings,	1751	Carpentering Special Trade Contractors
	Other Than Industrial Buildings and Warehouses	1752	Floor Laying and Other Floorwork Special Trade
16	CONSTRUCTION OTHER THAN BUILDING		Contractors, N.E.C.
	CONTRUCTION GENERAL CONTRACTORS		
	CONTROCTION - GENERAL CONTRACTORS	176	Roofing and Sheet Metal Work Special Trade
161	Highway and Street Construction, Except Elevated		Contractors
	Highways	1761	Roofing and Sheet Metal Work Special Trade
1611	Highway and Street Construction Contractors		Contractors
162	Heavy Construction, Except Highway and Street	177	Concrete Work Special Trade Contractors
.02	Construction	1771	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construc-		
	tion Contractors	178	Water Well Drilling Special Trade Contractors
1623	Water, Sewer, Pipe Line, Communication and	1781	Water Well Drilling Special Trade Contractors
	Power Line Construction Contractors	179	Miscellaneous Special Trade Contractors
1629	Heavy Construction Contractors, N.E.C.	1791	Structural Steel Erection Special Trade Contractors
17	CONSTRUCTION - SPECIAL TRADE	1793	Glass and Glazing Work Special Trade Contractors
''		1794	Excavating and Foundation Work Special Trade
	CONTRACTORS		Contractors
171	Plumbing, Heating (Except Electric), and Air Con-	1795	Wrecking and Demolition Work Special Trade
	ditioning Special Trade Contractors	1706	Contractors
1711	Plumbing, Heating (Except Electric), and Air Con-	1796	Installation or Erection of Building Equipment Special Trade Contractors, N.E.C.
	ditioning Special Trade Contractors	1799	Special Trade Contractors, N.E.C.
172	Painting, Paper Hanging, and Decorating Special		Special Frade Contractors, 14.E.C.
	Trade Contractors		
1721	Painting, Paper Hanging, and Decorating Special	6552	SUBDIVIDERS AND DEVELOPERS, EXCEPT
	Trade Contractors		CEMETERIES



APPENDIX C. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey New York Pennsylvania

EAST NORTH CENTRAL STATES

Illinois Indiana Michigan Ohio Wisconsin

WEST NORTH CENTRAL STATES

lowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES-Con.

North Carolina South Carolina Virginia West Virginia

EAST SOUTH CENTRAL STATES

Alabama Kentucky Mississippi Tennessee

WEST SOUTH CENTRAL STATES

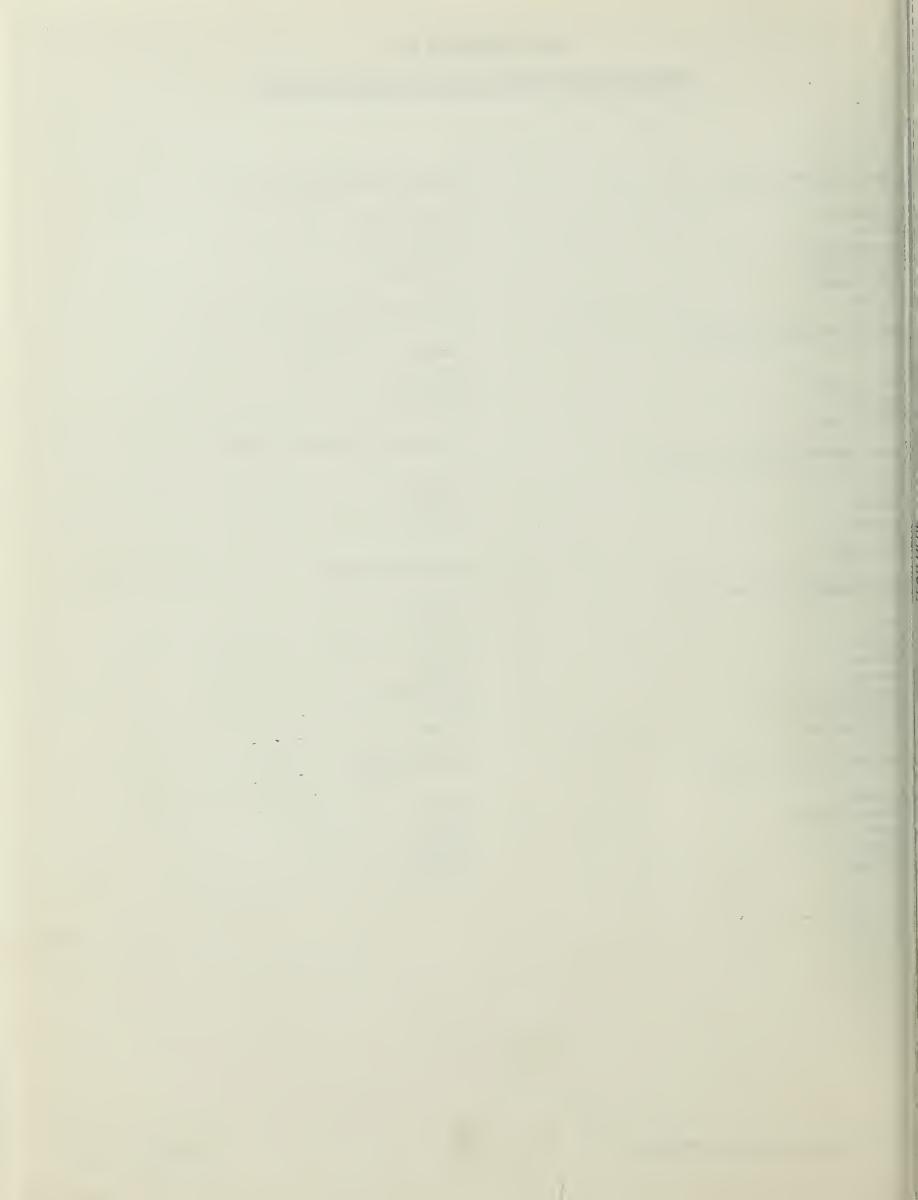
Arkansas Louisiana Oklahoma Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

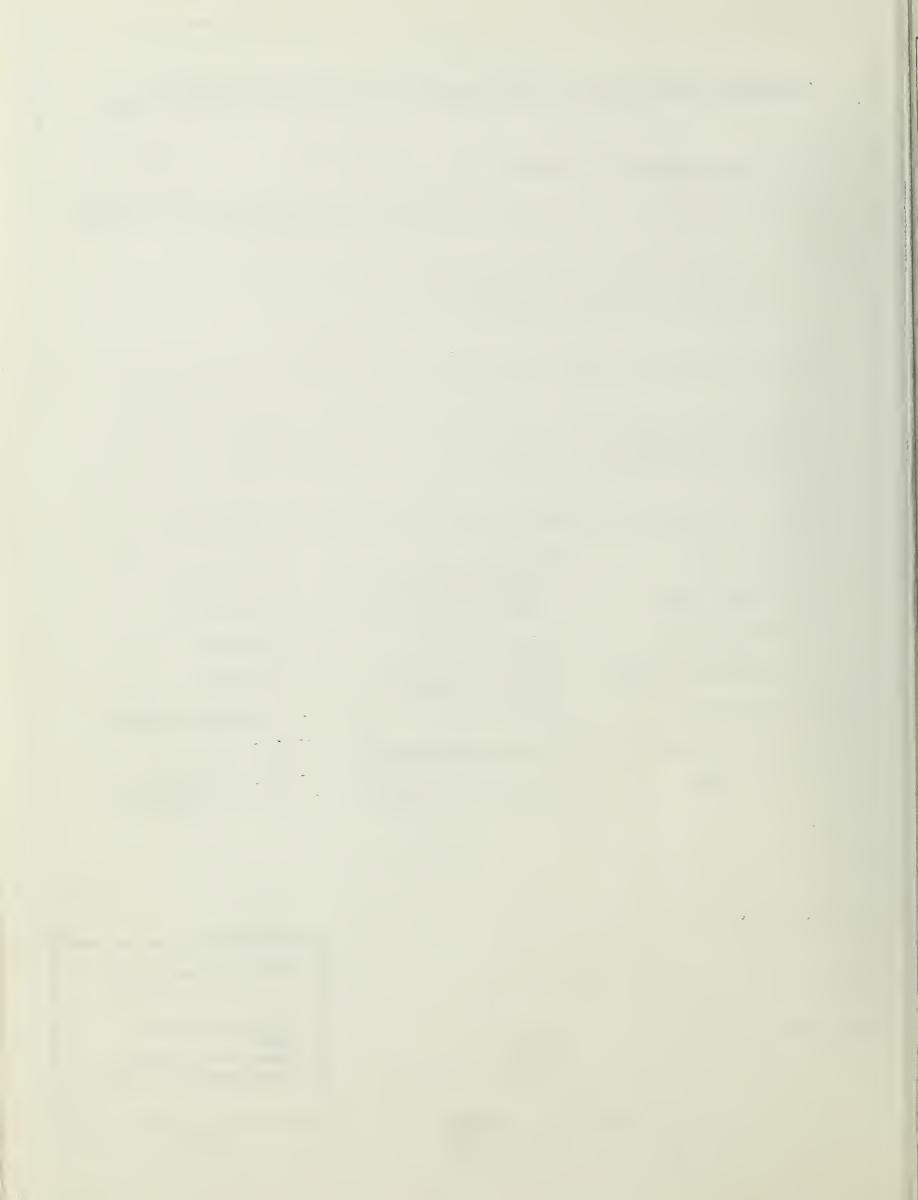
PACIFIC STATES

Alaska California Hawaii Oregon Washington



REFERENCE MATERIALS • ORDER FORMS • PUBLICATION CORRECTIONS

Please send me the items marked (X) below.	
Corrections (if there are any) fo		stries, Terrazzo, Tile, Marble, and Mosaic e Contractors, CC82-I-15
you should complete this f address shown below to re	fferent reports from the 1982 Econo form from each of the reports and re eceive publication corrections. How wing on only one of the forms.	turn it to the
☐ Guide to the 1982 Economic Ce	ensuses and Related Statistics	
	nt—A monthly notice of all products ous month—useful primarily to persetc., in the future.	
Publication announcements and or	der forms — Mark (X) subjects in wl	hich you are interested.
Retail Trade	Economic Censuses of Outlying Areas (Puerto Rico,	Governments
☐ Wholesale Trade	Guam, Virgin Islands, and Northern Mariana Islands)	☐ Foreign Trade
☐ Service Industries	☐ Enterprise Statistics	Population
Construction Industries	Minority- and Women- Owned Businesses	☐ Housing
☐ Manufacturing	Agriculture	☐ International Statistics
☐ Mineral Industries	☐ County Business Patterns	Geography
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PUBLICATION PROGRAM

1982 CENSUS OF CONSTRUCTION INDUSTRIES

Publications of the 1982 Census of Construction Industries, containing data on construction establishments in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

Preliminary Reports

Preliminary data from the 1982 census have been issued in 27 industry reports and 1 summary report. These reports are superseded by more detailed final reports.

Final Reports

Final detailed statistics are issued in separate paperbound reports.

Industry series - 28 reports (CC82-I-1 to -28)

Industry series — 27 reports (CC82-I-1 to -27). These reports present data for establishments with payroll and are published for each of the 27 industries included in the census. Each industry report presents 1982 data by State and for the United States on number of construction establishments; receipts; employment; hours worked; payrolls; payments to subcontractors; payments for materials, components, and supplies; payments for power and fuels; payments for selected purchased services; payments for the rental of machinery, equipment, and structures; value added; capital expenditures during the year; and depreciable assets. Limited data for 1977, 1972, and 1967 are also shown. In addition, more detailed data are shown at the U.S. level on construction receipts by type of structure (single-family houses, streets, roads, etc.). Selected data also are provided for establishments classified by their employment size and receipts size.

U.S. Summary — 1 report (CC82-I-28). This report summarizes the data for establishments with payroll presented in the 27 individual industry reports and presents limited data for establishments with no payroll.

Geographic area series - 10 reports (CC82-A-1 to -10)

Division reports (CC82-A-1 to -9). These reports are published for States grouped according to the nine census geographic divisions. Much of the geographic area series data are the same as presented in the

industry series, except here they are organized by State rather than by industry. Similar data also are presented for selected SMSA's. Data are provided for establishments classified by their employment size and receipts size. Data for establishments with no payroll as well as comparative 1977, 1972, and 1967 figures, on a limited basis, also are shown.

U.S. Summary by State (CC82-A-10). This report summarizes the data, as presented in the nine individual geographic division reports, for establishments with and without payroll.

Special series - 1 report (CC82-SP-1)

Legal form of organization and type of operation (CC82-SP-1)—This report presents limited data (number of establishments, number of proprietors and working partners, total employment, and total receipts) for construction establishments without payroll, for construction establishments with payroll, and for the aggregate, classified by industry and by legal form of organization. It also contains selected statistics (number of establishments, employment, payrolls, receipts, payments to subcontractors, net construction receipts, and value added) for construction establishments with payroll, classified by industry and by type of operation (multiunit or single-unit) and by legal form of organization.

Final Report Volume

Final paperbound reports subsequently are assembled and reissued in one clothbound volume.

Microfiche

All published data also are available on microfiche.

OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, manufactures, enterprise statistics, minority-owned businesses, women-owned businesses, and transportation also are issued as part of the 1982 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Mariana Islands. All published reports and microfiche are sold by the Superintendent of Documents, U.S. Government Printing Office. Appropriate announcements and order forms describing these products are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

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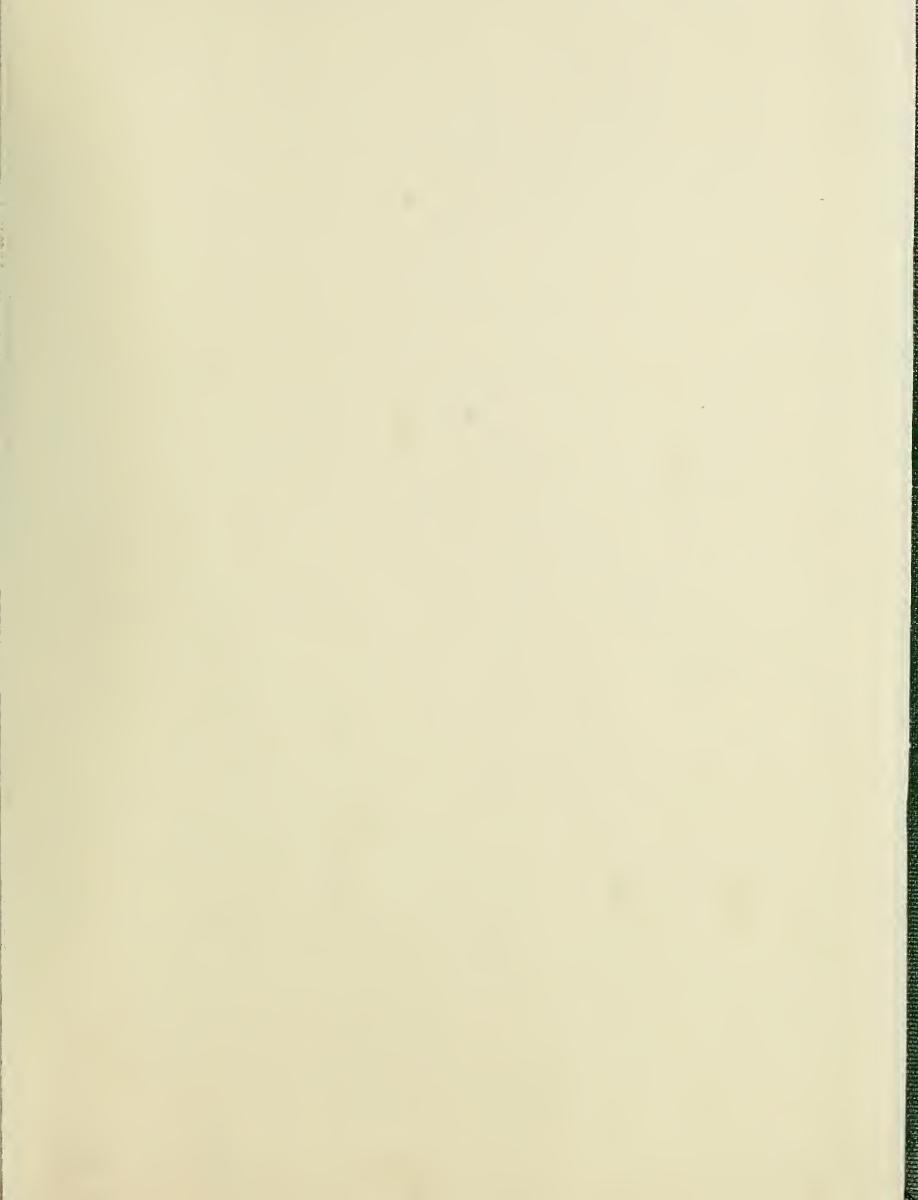




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